



ISSN: 1949-1492

Released March 18, 2021, by the National Agricultural Statistics Service (NASS), Agricultural Statistics Board, United States Department of Agriculture (USDA).

#### United States Honey Production Down 6 Percent in 2020

United States honey production in 2020 totaled 148 million pounds, down 6 percent from 2019. There were 2.71 million colonies producing honey in 2020, down 4 percent from 2019. Yield per colony averaged 54.5 pounds, down 2 percent from the 55.8 pounds in 2019. Colonies which produced honey in more than one State were counted in each State where the honey was produced. Therefore, at the United States level yield per colony may be understated, but total production would not be impacted. Colonies were not included if honey was not harvested. Producer honey stocks were 39.7 million pounds on December 15, 2020, down 3 percent from a year earlier. Stocks held by producers exclude those held under the commodity loan program.

### **Honey Prices Up 2 Percent in 2020**

United States honey prices increased 2 percent during 2020 to \$2.03 per pound, compared to \$1.99 per pound in 2019. United States and State level prices reflect the portions of honey sold through cooperatives, private, and retail channels. Prices for each color class are derived by weighting the quantities sold for each marketing channel. Prices for the 2019 crop reflect honey sold in 2019 and 2020. Some 2019 crop honey was sold in 2020, which caused some revisions to the 2019 crop prices.

#### Price Paid per Queen was 18 Dollars in 2020

The average prices paid in 2020 for honey bee queens, packages, and nucs were \$18, \$84, and \$105 respectively. Pollination income for 2020 was \$254 million, down 18 percent from 2019. Other income from honey bees in 2020 was \$55.8 million, down 28 percent from 2019. These estimates along with expenditure and apiary worker information can be found on page 4 of this report.

# Colonies, Yield, Production, Stocks, Price, and Value - States and United States: 2019

[Colonies which produced honey in more than one State were counted in each State]

State	Honey producing colonies <sup>1</sup>	Yield per colony	Production	Stocks December 15 <sup>2</sup>	Average price per pound <sup>3</sup>	Value of production <sup>4</sup>
	(1,000)	(pounds)	(1,000 pounds)	(1,000 pounds)	(dollars)	(1,000 dollars)
Alabama	7	42	294	44	3.38	994
Arizona	23	46	1,058	201	2.04	2,158
Arkansas	20	55	1,100	176	1.65	1,815
California	335	48	16,080	3,216	1.60	25.728
Colorado	32	46	1,472	500	2.34	3,444
Florida	205	45	9,225	830	2.46	22,694
Georgia	102	33	3,366	370	2.67	8,987
Hawaii	16	80	1,280	51	1.30	1,664
Idaho	92	32	2,944	677	1.62	4,769
Illinois	11	39	429	116	4.12	1,767
IIII1015	11	39	429	110	4.12	1,707
Indiana	9	55	495	188	3.78	1,871
lowa	38	55	2,090	1,170	2.35	4,912
Kansas	7	79	553	171	2.35	1,300
Kentucky	6	41	246	44	4.66	1,146
Louisiana	54	72	3,888	428	2.15	8,359
Maine	15	35	525	110	3.28	1,722
Michigan	94	50	4,700	1,363	2.56	12,032
Minnesota	118	59	6,962	3,063	1.83	12,740
Mississippi	22	80	1,760	141	1.87	3,291
Missouri	10	43	430	73	3.35	1,441
Montana	173	86	14,878	5,802	1.49	22,168
Nebraska	39	52	2,028	223	1.44	2,920
New Jersey	15	28	420	155	4.68	1,966
New York	59	58	3,422	1,027	4.00	13,688
North Carolina	14	42	588	118	4.11	2,417
North Dakota	520	65	33,800	6,422	1.43	48,334
Ohio	15	67	1,005	442	3.46	3,477
Oregon	87	32	2,784	1,141	2.50	6,960
Pennsylvania	19	50	950	409	4.41	4,190
South Carolina	16	47	752	45	5.03	3,783
South Dakota	270	72	19,440	7,582	1.56	30,326
Tennessee	8	72 57	456	91	4.72	2.152
	-	57 60		-		, -
Texas	126		7,560	1,663	2.32	17,539
Utah	22	29	638	89	1.97	1,257
Vermont	6	48	288	84	4.48	1,290
Virginia	5	39	195	49	7.19	1,402
Washington	81	35	2,835	1,191	2.18	6,180
West Virginia	6	37	222	47	4.26	946
Wisconsin	46	47 56	2,162	692	3.00	6,486
Wyoming	39	56	2,184	306	1.43	3,123
Other States <sup>5 6</sup>	30	47	1,418	351	4.65	6,594
United States 6 7	2,812	55.8	156,922	40,861	1.99	312,275

<sup>1</sup> Honey producing colonies are the maximum number of colonies from which honey was harvested during the year. It is possible to harvest honey from colonies which did not survive the entire year.

<sup>&</sup>lt;sup>2</sup> Stocks held by producers.

Average price per pound based on expanded sales.
 Value of production is equal to production multiplied by average price per pound.

<sup>&</sup>lt;sup>5</sup> Includes data for States not published in this table.

<sup>&</sup>lt;sup>6</sup> Due to rounding, total colonies multiplied by total yield may not exactly equal production.

<sup>&</sup>lt;sup>7</sup> United States value of production will not equal summation of States.

# Colonies, Yield, Production, Stocks, Price, and Value - States and United States: 2020

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State	Honey producing colonies <sup>1</sup>	Yield per colony	Production	Stocks December 15 <sup>2</sup>	Average price per pound <sup>3</sup>	Value of production <sup>4</sup>
	(1,000)	(pounds)	(1,000 pounds)	(1,000 pounds)	(dollars)	(1,000 dollars)
Alabama	7	39	273	66	5.43	1,482
Arizona	25	36	900	360	2.18	1,962
Arkansas	20	49	980	176	1.80	1,764
California	320	43	13,760	2,752	1.78	24,493
Colorado	30	41	1,230	455	2.09	2,571
Florida	192	46	8,832	883	2.28	20,137
Georgia	101	34	3,434	412	2.36	8,104
Hawaii	15	105	1,575	79	1.61	2,536
Idaho	107	35	3,745	637	1.75	6.554
Illinois	107	52	520	156	5.56	2,891
IIIIIIOIS	10	52	520	156	5.56	2,091
Indiana	9	55	495	149	4.14	2,049
lowa	35	58	2,030	1,259	2.59	5,258
Kansas	8	62	496	164	2.93	1,453
Kentucky	7	33	231	58	6.25	1,444
Louisiana	33	69	2,277	228	2.42	5,510
Maine	10	30	300	78	3.26	978
Michigan	95	47	4,465	1,384	2.70	12,056
Minnesota	108	55	5,940	2,495	1.75	10,395
Mississippi	25	73	1,825	146	1.94	3,541
Missouri	9	41	369	100	3.31	1,221
Montana	110	81	8,910	3,208	1.57	13,989
Nebraska	37	52	1,924	250	1.71	3,290
New Jersey	14	31	434	91	7.99	3,468
New York	58	56	3,248	844	3.39	11,011
North Carolina	12	38	456	123	5.13	2,339
North Dakota	495	78	38,610	8,108	1.60	61,776
Ohio	16	75	1,200	576	3.85	4,620
Oregon	95	29	2,755	1,102	2.47	6,805
Pennsylvania	19	48	912	392	4.74	4,323
South Carolina	16	46	736	66	3.28	2,414
South Dakota	245	61	14,945	8,668	1.60	23,912
Tennessee	7	51	357	54	4.39	1,567
Texas	157	57	8,949	1,253	1.90	17,003
Utah	28	34	952	171	2.07	1,971
Vermont	6	47	282	96	3.76	1,060
Virginia	5	40	200	54	5.44	1,088
Washington	98	37	3,626	798	2.54	9,210
West Virginia	6	46	276	58	3.89	1,074
Wisconsin	45	50	2,250	855	3.26	7,335
Wyoming	38	40	1,520	608	1.66	2,523
Other States <sup>5 6</sup>	33	42	1,375	303	4.36	5,995
United States 6 7	2,706	54.5	147,594	39,715	2.03	299,616

<sup>&</sup>lt;sup>1</sup> Honey producing colonies are the maximum number of colonies from which honey was harvested during the year. It is possible to harvest honey from colonies which did not survive the entire year. 
<sup>2</sup> Stocks held by producers.

<sup>&</sup>lt;sup>3</sup> Average price per pound based on expanded sales.

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# Honey Price by Color Class - United States: 2019 and 2020

Color class	Co-op and private		Re	tail	All	
Color class	2019	2020	2019	2020	2019	2020
	(dollars per pound)					
Water white, extra white, white	1.63	1.69	4.70	4.94	1.70	1.77
Extra light amber	1.70	1.76	3.63	4.64	1.90	1.88
Light amber, amber, dark amber	1.95	1.87	5.30	5.26	2.57	2.35
All other honey, area specialties	3.16	2.36	6.62	7.62	3.99	2.87
All honey	1.73	1.78	4.82	5.22	1.99	2.03

# Income and Expenditures - United States: 2019 and 2020

[Represents income and expenditures on the total number of colonies, regardless of whether honey was harvested]

Item	2019	2020
	(1,000 dollars)	(1,000 dollars)
Income Pollination income Other income <sup>1</sup>	309,630 77,677	254,282 55,773
Expenditures  Varroa control and treatment  Other colony issues <sup>2</sup> Feed <sup>3</sup> Foundation  Hives/woodenware	16,366 4,535 58,010 7,887 11,939	11,706 3,166 40,930 6,567 11,153

<sup>&</sup>lt;sup>1</sup> Includes sales of queens, queen cells, beeswax, propolis, etc.

# Queen, Package, and Nuc Prices Paid - United States: 2019 and 2020

[Represents prices paid on the total number of colonies, regardless of whether honey was harvested]

Item	2019	2020	
	(dollars)	(dollars)	
Queen	18	18	
Package	85	84	
Nuc	100	105	

# Apiary Workers - United States: 2019 and 2020

[Represents number of paid and unpaid workers that worked with colonies, regardless of whether honey was harvested]

Item	2019	2020
	(workers)	(workers)
Apiary workers	25,000	24,000

<sup>&</sup>lt;sup>2</sup> Includes Nosema, tracheal mites, foulbrood, paralysis, Kashmir, cloudy wing, etc.

<sup>&</sup>lt;sup>3</sup> Includes syrup, sugar water, honey, pollen patties, and other feeds.

# **Statistical Methodology**

**Survey Procedures:** Data for honey producing operations are collected from a stratified sample of all known operations with at least 5 honey bee colonies that also meet USDA's definition of a farm. To qualify as a farm, an operation must be any place from which \$1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the year. NASS Regional Field Offices maintain a list of all known operations and use known sources of operations to update their lists. All sampled operations are mailed a questionnaire and given adequate time to respond by mail or electronic data reporting (EDR). Those that do not respond by mail or EDR are telephoned or possibly enumerated in person. Prices are collected by color class and marketing channel from operations with five or more colonies.

**Estimation Procedures:** Sound statistical methodology is employed to derive the estimates from reported data. All data are analyzed for unusual values. Data from each operation are compared to their own past operating profile and to trends from similar operations. Data for missing operations were estimated based on similar operations or historical data. State offices prepare these estimates by using a combination of survey indications and historic trends. Prices for each color class are derived by weighting the quantities sold for each marketing channel. Individual State estimates are reviewed by the Agricultural Statistics Board for reasonableness.

**Revision Policy:** The previous year's estimates are subject to revision when current year's estimates are made. Revisions are the result of late reports or corrected data. Price revisions can be the result of additional sales reported the following year. Estimates will also be reviewed after data from the 5-year Census of Agriculture are available. No revisions will be made after that date.

**Reliability:** Since all operations are not included in the sample, survey estimates are subject to sampling variability. Survey results are also subject to non-sampling errors such as omissions, duplication, and mistakes in reporting, recording, and processing the data. While these errors cannot be measured directly, they are minimized through strict quality controls in the data collection process and a careful review of all reported data for consistency and reasonableness.

To assist in evaluating the reliability of the estimates in this report, the "Root Mean Square Error" is shown for selected items in the following table. The "Root Mean Square Error" is a statistical measure based on past performance and is computed using the differences between first and final estimates. The "Root Mean Square Error" for honey producing colonies over the past 10 years is 1.1 percent. This means that chances are 1 out of 3 that the final estimate will not be above or below the current estimate of 2.71 million colonies by more than 1.1 percent. Chances are 9 out of 10 that the difference will not exceed 2.0 percent.

#### **Reliability of Honey Estimates**

[Based on data for the past 10 years]

[Based on data for the past for years]								
ltem		90 percent confidence level	Difference between first and latest estimate					
	Root mean square error		Average	Smallest	Largest -	Years		
	oquare error					Below latest	Above latest	
	(percent)	(percent)	(1,000)	(1,000)	(1,000)	(number)	(number)	
Honey producing colonies	1.1	2.0	12	-	85	2	1	
Honey production	1.1	2.1	701	-	4,796	2	1	

<sup>-</sup> Represents zero.

#### Information Contacts

Listed below are the commodity specialists in the Livestock Branch of the National Agricultural Statistics Service to contact for additional information. E-mail inquiries may be sent to nass@usda.gov

Travis Averill, Chief, Livestock Branch	(202) 692-0069
Vacant, Head, Poultry and Specialty Commodities Section	(202) 690-3223
Holly Brenize – Poultry Slaughter	
Alissa Cowell-Mytar – Cold Storage, Capacity of Refrigerated Warehouses	. ,
Liana Cuffman – Catfish and Trout, Mink, Census of Aquaculture	(202) 720-8784
Fatema Haque – Turkey Hatchery, Turkeys Raised	(202) 720-3244
Derron Martin – Chicken Hatchery, Egg Products	(202) 690-3237
Adam Peters – Honey, Honey Bee Colonies	(202) 690-4870
Autumn Stone – Layers, Eggs	(202) 690-3676
Takiyah Walker – Broiler Hatchery	(202) 720-6147

### **Access to NASS Reports**

For your convenience, you may access NASS reports and products the following ways:

- All reports are available electronically, at no cost, on the NASS web site: <a href="www.nass.usda.gov">www.nass.usda.gov</a>
- ➤ Both national and state specific reports are available via a free e-mail subscription. To set-up this free subscription, visit <a href="www.nass.usda.gov">www.nass.usda.gov</a> and click on "National" or "State" in upper right corner above "search" box to create an account and select the reports you would like to receive.
- Cornell's Mann Library has launched a new website housing NASS's and other agencies archived reports. The new website, <a href="https://usda.library.cornell.edu">https://usda.library.cornell.edu</a>. All email subscriptions containing reports will be sent from the new website, <a href="https://usda.library.cornell.edu">https://usda.library.cornell.edu</a>. To continue receiving the reports via e-mail, you will have to go to the new website, create a new account and re-subscribe to the reports. If you need instructions to set up an account or subscribe, they are located at: <a href="https://usda.library.cornell.edu/help.">https://usda.library.cornell.edu/help.</a>. You should whitelist <a href="motifications@usda-esmis.library.cornell.edu">notifications@usda-esmis.library.cornell.edu</a> in your email client to avoid the emails going into spam/junk folders.

For more information on NASS surveys and reports, call the NASS Agricultural Statistics Hotline at (800) 727-9540, 7:30 a.m. to 4:00 p.m. ET, or e-mail: <a href="mass@usda.gov">nass@usda.gov</a>.

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# **USDA NASS Data Users' Meeting**

Virtual Meeting April 14 and 15, 2021 12:00 – 3:00 pm ET

USDA's National Agricultural Statistics Service (NASS) will hold a virtual meeting for users of U.S. domestic and international agriculture data. Along with NASS, the 2021 Spring Data Users' Meeting will headline the Agricultural Marketing Service, Economic Research Service, Farm Service Agency, Foreign Agricultural Service, World Agricultural Outlook Board – and the Census Bureau's Foreign Trade Division. Representatives will provide agency updates, answer questions, and listen to concerns from data users.

#### **Abbreviated Agenda**

<u>Day 1 – April 14</u>

Agency Updates- All agencies

AMS Market News - Agricultural Marketing Service

World Board Meteorology - World Agricultural Outlook Board

NASS Grain Stocks Program - National Agricultural Statistics Service

Foreign Production, Trade, and Import/Export Data - World Agricultural Outlook Board, Foreign
Agricultural Service, and U.S. Census Bureau

#### Day 2 – April 15

Open Forum – All agencies

NASS Modernization - National Agricultural Statistics Service

ERS Research - Economic Research Service

For registration details or additional information about the Data Users' Meeting, see the meeting page on the NASS website (<a href="https://www.nass.usda.gov/Education\_and\_Outreach/Meeting/index.php">https://www.nass.usda.gov/Education\_and\_Outreach/Meeting/index.php</a>).